

DOT-DOT-DASH

Challenge

Noble County transportation sends out road line striping contracts each year. Staff must determine which roadways to include, total the skip and solid stripes, write it up and send it out to contractors for bids. The traditional process of totaling the stripes from the striping books takes three days to add by hand. The County knew GIS had saved on asset management - could it be used to streamline road striping?

Action

The County began by creating digital road centerlines, marking the start and end points. Tables were associated with each line that allowed the user to include information on variables like striping, offsets, measurement in lineal feet, and road ID numbers. Users select a road, then narrow down the other options. The total lineal feet of paint for a road can then be found by highlighting the length column and choosing the statistics button.

Results

The first time this process was used to develop a striping contract, there was a time savings of nearly 75%. The second time, the savings increased to 83%.

In addition, whenever paint totals submitted by the contractor deviate by 5% from the calculated amount, those areas must be manually measured in the field by County staff. For this project, the largest road differential was 2%, with a total contract differential of only 0.41%. Therefore, no secondary road time was required. This was a significant time savings for Noble County, and freed up staff time to be spent on other projects.

This is a highly adaptable process that can be used with anything that is measured in lineal feet: curbs, sidewalks, roadways, and even legal drains. When large sections need to be repaired or replaced, they can be measured in minutes instead of hours. Quicker response and completion time benefits the County and its customers, the public.



GIS saves Noble County 83% on their line striping contracts, and the same process can be applied to street repair, curb maintenance, even drainage projects.